



THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: )  
)  
JOHNSON ET AL )  
)  
Serial No. 09/899,329 )  
)  
Filed: July 5, 2001 )  
)  
For: HIGH FIBER COUNT OPTICAL )  
FIBER CABLE WITH BUFFER )  
TUBES AROUND CENTRAL )  
STRENGTH MEMBER )

Assistant Commissioner for Patents  
Washington, D.C. 20231

PRELIMINARY AMENDMENT

Sir:

Prior to the examination of the subject application, please add the following claims:

---

23. An elongated optical fiber cable with a longitudinal axis and with more than 1000 optical fibers, said cable having a fill factor not greater than about 85% in a two inch duct and said cable comprising:

a central strength member structure coaxial with the longitudinal axis;

a plurality of longitudinally extending buffer tubes disposed around the central strength member structure in a single layer with each tube in contact with a pair of adjacent tubes and in contact with the strength member structure, the number of buffer tubes being four and each tube having a bore of a predetermined size;

a plurality of optical fiber ribbons in a stack in the bore of each of said tubes, each stack substantially filling, but being loosely received, in the bore of the tube in which the stack is received and each ribbon

comprising a plurality of optical fibers in side-by-side relation and wherein the total number of optical fibers in the plurality of buffer tubes is greater than 1000; and

a jacket encircling the plurality of buffer tubes.

24. An elongated optical fiber cable as set forth in claim 23 wherein the number of optical fibers is more than 1500 and the fill factor not greater than 65% in a two-inch duct.

25. An elongated optical fiber cable as set forth in claim 23 wherein the number of optical fibers is more than 1500 and the fill factor is not greater than about 85% in a one-and one-half inch duct.

26. An elongated optical fiber cable as set forth in claim 23 wherein the number of optical fibers is more than 2000 and the fill factor is not greater than about 80% in a two-inch duct.

27. An optical fiber cable as set forth in claim 23 wherein there are interstices within the jacket which are intermediate pairs of buffer tubes and which are also intermediate such pairs of buffer tubes and the jacket and further comprising additional optical fibers in at least one of the interstices.

28. An optical fiber cable as set forth in claim 27 wherein the number of optical fibers is more than 1800 and the fill factor is not greater than 85% in a one-and one-half inch duct.

29. An optical fiber cable as set forth in claim 27 wherein the additional optical fibers are loosely received in a buffer tube which is loosely received in the interstice.

30. An optical fiber as set forth in claim 23 wherein each of the ribbons in each stack comprises twenty-four optical fibers, wherein the cable comprises additional optical fiber ribbons with a lesser number of optical fibers and which are disposed at at least one end of